

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-17 are pending in the present application. Claim 1 is amended by the present amendment.

In the outstanding Office Action, Claims 1, 3, 6-9, and 11 were rejected under 35 U.S.C. § 102(b) as anticipated by Ichikawa (Japanese Patent JP 06-130818 A, herein “Ichikawa”); Claim 2 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Matsuzaki (Japanese Patent JP 08-106211, herein “Matsuzaki”); Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Isobe et al. (U.S. Patent Publication No. US 2003/0123889 A1, herein “Isobe”); Claim 5 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Asanuma (Japanese Patent JP 06-083179 A, herein “Asanuma”); Claim 10 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Aimoto et al. (U.S. Patent No. 5,310,423, herein “Aimoto”); Claims 12, 13, and 14 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Aimoto; and Claims 15, 16, and 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ichikawa in view of Isobe.

Regarding the rejection of Claims 1, 3, 6-9, and 11 under U.S.C. § 102(b) as anticipated by Ichikawa, independent Claim 1 has been amended to recite that a first measurement device has an operation principle different from a second measurement device. The claim amendments find support in the specification, for example in paragraph [0026]. No new matter has been added.

Briefly recapitulating, independent Claim 1 is directed to an image forming apparatus that includes, *iter alia*, a first measurement device and a second measurement device that measure first and second developer characteristics having first and second values,

respectively, the first characteristic being different from the second characteristic. The first measurement device has an operation principle different from the second measurement device. In a non-limiting example, Figure 2 shows the image forming apparatus having the first measurement device 22 and the second measurement device 23.

Turning to the applied art, Ichikawa shows in Figure 3 an apparatus having a first sensor 30 and a second sensor 31. However, as specifically disclosed by Ichikawa in paragraph [0032], “[t]he above-mentioned sensor 30 for toner concentration detection and the sensor 31 for developer degradation degree detection ... consists of a permeability sensor of the same configuration.” Therefore, Ichikawa does not teach or suggest a first measurement device having an operation principle different from a second measurement device as required by amended Claim 1.

Applicants note that the outstanding Office Action indicates at page 10, first full paragraph, that Matsuzaki discloses a developer reflection intensity sensor and it would be obvious for one of ordinary skill in the art to replace the sensor 30 in Ichikawa with the reflection intensity sensor of Matsuzaki to achieve an image forming apparatus having two different types of sensors as required by the device of Claim 1.

Applicants respectfully submit that the modification of Ichikawa based on the teachings of Matsuzaki as proposed by the outstanding Office Action is not possible for the following reasons. Ichikawa specifically discloses in paragraph [0042] that the first sensor 30 is maintained at a constant voltage output 5.0V by the control unit 32 as shown in Figure 8. Further, Ichikawa discloses in the same paragraph that the second sensor 31 has an output that increases with the number of sheets used. In addition, Ichikawa discloses in paragraph [0044] that the control device 32 compares the output value of the sensor 30 that is maintained at 5.0 volts with the output of sensor 31, which uses the same sensor as sensor 30, to determine the degradation degree of a developer.

Therefore, Applicants respectfully submit that in order for the device of Ichikawa to be able to compare the output of the sensor 30 shown in Figure 8 with the output of the sensor 31 shown in Figure 9 of Ichikawa, both sensors 30 and 31 should be of the same type. Otherwise, if two different sensors are used in Ichikawa, the comparison of the outputs of two different sensors is meaningless.

In other words, by replacing any sensor of Ichikawa with a sensor of a different type as suggested by the outstanding Office Action would destroy the operation principle of the device in Ichikawa. Thus, such modification of Ichikawa would change the basic principle of operation of the device of Ichikawa and Applicants respectfully submit that there is no evidence that a person of ordinary skill in the art would be motivated to perform such changes and redesign.¹

Accordingly, Applicants respectfully submit that amended Claim 1 and each of the claims depending therefrom patentably distinguish over Ichikawa and Matsuzaki, either alone or in combination.

Regarding the remaining rejections of the dependent claims, the applied art has been considered but none of the references cures the deficiencies of Ichikawa and Matsuzaki discussed above with regard to independent Claim 1. Accordingly, it is respectfully submitted that dependent Claims 2, 4, 5, 10, and 12-17 patentably distinguish over the applied art for the reasons discussed above.

¹ See In re Ratti, 270 F.2d 810, 813, 123 USPQ 349, 352 (reversing an obviousness rejection where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." (Emphasis added))

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

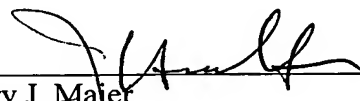
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